REMARKS

Drawings

Figures 6-8 were objected to under MPEP 608.02(d) (assumed to refer to 37 CFR 1.83(a)), because "these drawings do not show the opening and closing of SPC 100 by the mechanical assembly 102 which is also claimed in claim 26," Office Action, page 2, lines 2-3. However, Figures 6-8 show SPC 100 in various stages of operation, including different displacement between upper housing 104 and lower housing 134. In particular, Figure 6 shows upper housing 104 separated from lower housing 134 and Figures 7 and 8 show upper housing 104 and lower housing 134 closer together. This movement is described in the text, "Mechanical assembly 102 drives the opening and closing of SPC 100, i.e. it brings together or separates the upper housing 104 and lower housing 134 to close or open SPC 100," paragraph [0028]. Mechanical assembly 102 is clearly shown in Figures 6-8. Thus, the opening and closing of SPC 100 by mechanical assembly 102 is believed to be shown by Figures 6-8. In addition, it is submitted that the opening and closing of SPC 100 by the mechanical assembly 102 is not specified in claim 26. Claim 26 is not limited to any particular apparatus for opening or closing an enclosure. Thus, it is not seen how mechanical assembly 102 is considered to be a "feature of the invention specified in the claim," under 37 CFR 1.83(a).

Furthermore, the Office Action stated, "Figures 6-8 ... do not depict any linkage with the lower temperature control element 132 or the lower enclosure 134. To this extent Figures 6-8 do not show the claimed details claimed in the invention," page 2, lines 4-8. Assuming the invention referred to is that of claim 26, this statement is not well understood. Claim 26 does not claim a particular linkage with a lower temperature control element or lower enclosure. Therefore, it is not seen how any failure to show such linkage could be considered to be in conflict with 37 CFR 1.83(a).

The Office Action appears to indicate that more detail of mechanical assembly 102 is required under 37 CFR 1.83(a) because of certain elements of claim 26. Claim 26 does not recite any specific apparatus to vary a rate of closure, so it is not clear which features of claim 26 prompted this objection. Furthermore, 37 CFR 1.83(a) states, "conventional features disclosed in the description and claims, where their detailed illustration is not essential for a proper understanding of the invention, should be illustrated in the drawing in the form of a graphical

drawing symbol or a labeled representation." It is submitted that the illustration of mechanical assembly 102 in Figures 6-8 shows at least a graphical drawing symbol or labeled representation and that Figures 6-8 satisfy 37 CFR 1.83(a). If this objection to the drawings is maintained, it is requested that a specific feature, or features, of claim 26 be identified as the basis of the objection. Furthermore, to the extent that an objection is based on an assertion that mechanical assembly 102 requires more detailed illustration, it is requested that official notice be taken (see MPEP 2144.03) or evidence be provided, indicating that mechanical assembly 102 is not a conventional feature and that a detailed illustration of mechanical assembly 102 is essential for a proper understanding of the invention of claim 26.

Claim Objections

Claims 23-25 are canceled and are indicated as "canceled" in the attached copy of the claims.

Claim Rejections under 35 USC 112

Claims 3, 5 and 30 are rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claim 30 is amended, without prejudice, to remove the term "and environment" that was apparently considered indefinite. Thus, this rejection of claim 30, inasmuch as it is understood, is believed to be overcome. No change in the scope of claim 30 is believed to result. No admission is made with respect to the Office Action's assertions regarding claim 30, or with respect to giving patentable weight to the preamble of claim 30.

The rejections of claims 3, 5, and 30 are not well understood because the substance of the rejections appears to be some perceived differences between the scope of the claims and the content of the disclosure, not any indefiniteness of the claim language. Furthermore, the Office Action appears to attribute particular meanings to each of the claim terms discussed and thus appears to find such terms to be definite. Therefore, clarification is requested. Are these claims indefinite, i.e. do the claims meet "the threshold requirements of clarity and precision," (MPEP 2173.02), or are the claims definite but given some specific interpretation? To the extent that any term of claims 3, 5 or 30 is found indefinite, an analysis is requested. "If upon review of a

claim in its entirety, the examiner concludes that a rejection under 35 U.S.C. 112, second paragraph, is appropriate, such a rejection should be made and an analysis as to why the phrase(s) used in the claim is 'vague and indefinite' should be included in the Office Action." MPEP 2173.02 at 2100-214 (emphasis added). In the present Office Action, instead of an analysis of why particular phrases were considered vague and indefinite, specific (and apparently definite) interpretations of claim language are given. This appears to be inconsistent with the rejections of these claims as indefinite. It also appears inconsistent with the requirement that claim terms be given their broadest reasonable meaning. In addition, it does not provide an analysis that would allow a full response to the charge of indefiniteness.

No admission is made with respect to the assertions of the Office Action regarding claims 3, 5 and 30. In particular, because claims 3, 5, and 30 were rejected under 35 USC 112, the Office Action has indicated that the scope of the claims was not understood when these interpretations were developed and so any assertion as to the scope of claims 3, 5, and 30 is based on an admitted misunderstanding. It is expected that, when an analysis is provided explaining why particular phrases in claims 3 and 5 are considered vague and indefinite, subsequent clarification will enable the full scope of the claims to be clearly understood.

Claim Rejections under 35 USC 103

Claims 1, 3, 4, 18, and 26-29 are rejected under 35 USC 103(a) as being unpatentable over admitted prior art in view of Akimoto et al. (USP 6,097,005) and Hughes (USP 5,287,914). The Office Action stated, "Admitted prior art in view of Akimoto does not teach second proximity pins," page 5, line 11. The Office Action cited heat sink spacers 2 of Hughes as proximity pins. However, it is not seen how a heat sink spacer of Hughes could be considered as a proximity pin. In particular, although the precise structure of heat sink spacers 2 of Hughes does not appear to be shown, heat sink spacers 2 of Figure 1 do not appear to have a structure that would be considered within the ordinary meaning of the term "proximity pins."

Furthermore, claim 1 recites, "a second temperature controlled plate comprising second proximity pins," (emphasis added). In contrast, Hughes appears to show only one heat sink spacer 2 attached to each heat sink 3. "The substrate cooling station 1 generally comprises two

heat sink spacers 2 mounted on a pair of heat sinks 3," column 3, lines 56-58. Thus, even if a heat sink spacer 2 were considered to be a proximity pin, Hughes does not appear to show a temperature controlled plate comprising "proximity pins" because only one heat sink spacer is shown per heat sink.

In addition, no adequate motivation appears to be provided for combining a heat sink spacer of Hughes with the apparatus of admitted prior art in view of Akimoto. The Office Action cited elimination of risk of damage to wafers (Column 4, lines 5-20 of Hughes) as a motivation. However, it is not clear how combining a heat sink spacer of Hughes with the apparatus of Akimoto would achieve this result. In particular, the cited portion of Hughes states, "The surfaces of the heat sink spacers 2 are closely spaced to achieve a substantial convective/ conductive heat transfer from the substrate 10 to the heat sinks 3, but not in contact with the substrate 10 when positioned therein, eliminating any risk of damage to the delicate substrate surfaces," column 4, lines 9-14 (emphasis added). Thus, it appears to be the absence of contact that eliminates risk of damage to the substrate surfaces according to Hughes. In contrast, merely combining a heat sink spacer of Hughes with apparatus of admitted prior art or Akimoto would not appear to achieve this result. In particular, Akimoto appears to teach supporting a substrate on lift pins 22, thus providing contact to the substrate. It is unclear how this apparatus could be combined with that of Hughes so that there is no contact with the substrate. If there were contact with the substrate, it would appear to be contrary to the intended purpose of Hughes. "The proposed modification cannot render the prior art unsatisfactory for its intended purpose," MPEP 2143.01-V. Hughes's statement that contact with the substrate is avoided appears to teach away from combining the apparatus of Hughes with the apparatus of admitted prior art or Akimoto, which both include contact with a substrate.

Furthermore, the apparatus of Hughes includes, "stationary heat sinks." It is not seen how this structure could be combined with the apparatus of the admitted prior art or Akimoto, which both include moving parts, without making an apparatus of admitted prior art or Akimoto unsatisfactory for its intended purpose. Because a second temperature control plate comprising second proximity pins has not been shown, and because no adequate motivation to combine the references has been provided, no *prima facie* case of obviousness has been stated with respect to claim 1. Therefore, claim 1 is believed to be allowable.

Claims 3-10 are submitted to be allowable at least for depending from an allowable base claim. In addition, claims 3-10 recite additional limitations that make them additionally allowable over the cited references.

Claim 3 is amended, without prejudice, for clarification, to recite, "the second proximity pins are movable such that the distance between the first and second temperature controlled plates may be varied." The Office Action cited heat sink spacers 2 of Hughes as second proximity pins and stated that heat sink spacers 2 "can be set to maintain critical spacing between substrate and heat sinks (includes varying distance between the two temperature controlled plates)," Office Action page 6, lines 4-6. However, it is not seen how Hughes's disclosure that, "The heat sink spacers 2 are employed to conveniently set and maintain the critical spacing between the substrate and the heat sinks 3,"(column 3, lines 58-60) can be read to show pins that are movable to vary distance. In particular, "set and maintain the critical spacing" would appear to refer to fixing a spacing to a single value that is not varied. Elsewhere, Hughes discusses "stationary heat sinks spaced a predetermined distance apart," column 2, lines 23-24. Thus, Hughes appears to teach away from a spacing that is varied. Because this claim element has not been shown, claim 3 is submitted to be additionally allowable.

Claim 18 recites, "the second heating plate spaced from the first heating plate by second proximity pins when the second heating plate is in a closed position, the second heating plate being more distant from the first heating plate when in an open position." These limitations do not appear to be taught by any of the cited references, or by a combination of the cited references. In particular, heat sink spacers 2 of Hughes do not appear to be proximity pins as discussed above. It is not clear how heat sink spacers 2 of Hughes that set and maintain the spacing between stationary heat sinks could be added to the apparatus of Akimoto, or how they would operate with heating plates having a closed position and an open position. Hughes appears to teach away from such a combination as discussed above.

Claims 19-22 depend from claim 18 and are submitted to be allowable at least for depending from an allowable base claim.

Claims 26-29 were rejected over admitted prior art in view of Akimoto and Hughes, without identifying features in the cited prior art corresponding to all claim elements. Thus, no *prima facie* case of obviousness was made. Furthermore, elsewhere in the Office Action, it was

stated, "Regarding Claim 26-28: Admitted prior art in view of Akimoto and Hughes teach all limitations of the claim except for enclosure operable to vary rate of closure or temp control of the temp altering devices," page 12, lines 1-3. Thus, the Office Action appeared to indicate that a rejection of claims 26-28 over admitted prior art in view of Akimoto and Hughes, without an additional reference, would not be possible because at least one claim element would not be shown. Claim 29 appeared to be similarly treated as requiring an additional reference for any rejection (see Office Action, page 12, lines 13-14). It was confirmed in an interview with the Examiner (see below) that this rejection was made in error.

Claims 5, 6, 10, 11, 19, 22, 30-32, 34, 35 were rejected under 35 USC 103(a) as being unpatentable over admitted prior art in view of Akimoto et al. (USP 6,097,005) and Hughes (USP 5,287,914) as applied to Claims 1, 4, 18 and further in view of Dhindsa et al. (USP 6,245,192).

Claim 5 recites, "each of the plurality of laminar flow paths comprising one laminar flow element controlling the flow rate of said flow path, the laminar flow element providing gas to one gas passage that leads to the exterior of the flow distribution manifold." These limitations do not appear to be shown by the cited references. In particular, the cited features of Dhindsa do not appear to correspond to these limitations. Channels 70 of Dhindsa (identified as laminar flow elements) do not appear to provide gas as claimed. A channel 70 of Dhindsa appears to supply gas to multiple openings 80, 82 and subsequently to multiple openings in showerhead 22 (see Figure 4). This rejection appears to be based on a misunderstanding of claim 5 as discussed earlier. It is believed that, when claim 5 is understood, it will be seen to distinguish over the cited references because Dhindsa, and the other cited references, do not appear to show at least the elements of claim 5 cited here.

Claim 6 is submitted to be allowable at least for depending from claim 5.

Claim 10 recites, "a gas output flow regulator." MFC1 and MFC2 of Dhindsa (Figure 5) were cited as examples of gas regulation. However, MFC1 and MFC2 of Dhindsa appear to control gas going into a process chamber, not coming out of a process chamber (see Figure 3 and column 4, lines 19-41. It is not seen how this could be considered as a gas output. Thus, claim 10 is submitted to be additionally allowable.

Claim 11 was rejected over admitted prior art in view of Akimoto, Hughes, Dhindsa and Or "as explained above," Office Action, page 8, line 4. However, no previous rejection was made using the Or reference. Thus it is unclear which features of the cited references are considered to correspond to elements of claim 11. No motivation is provided for combining the Or reference with the previously cited references in rejecting claim 11. Thus, no *prima facie* case of obviousness is shown. Claims 12-15 depend from claim 11 and are submitted to be allowable at least for depending from an allowable base claim.

Claim 22 was rejected because "Dhindsa et al. teaches all limitations of the claim as explained above," Office Action, page 8, lines 17-18. However, claim 22 recites, "a flow channel plate, the one or more flow control elements formed in the flow channel plate." This limitation was not recited in an earlier claim, so no elements in the cited prior art were identified as showing these limitations. Thus, no *prima facie* case of obviousness is stated with respect to claim 22. The Office Action appeared to identify MFC 1 and MFC 2 as "flow control elements" of claim 19 (from which claim 22 depends). See Office Action page 8, lines 7-11. It is not seen how MFC 1 and MFC 2 could be considered to be formed in a flow channel plate. Therefore, claim 22 is submitted to be additionally allowable.

Claims 30-32 and 34 were rejected without specifically identifying features in the cited prior art that correspond to all claim features. Thus, no *prima facie* case of obviousness was stated with respect to claims 30-32. It is pointed out that claims 30-32 recite limitations not found in other claims. To the extent that limitations of claims 30-32 resemble those of earlier claims, the arguments given above may be applied to the rejection of claims 30-32.

In addition, claim 32 is amended, without prejudice, to recite, "a lower limit of movement of the upper temperature controlled plate is established by upper pins extending from the upper temperature controlled plate, the upper pins contacting the lower temperature controlled plate when the lower limit is reached." This limitation clearly distinguishes over a combination of admitted prior art, Akimoto, Hughes and Dhindsa. In particular, heat sink spacer 2 of Hughes does not appear to contact an opposing heat sink and there appears to be no lower limit in Hughes because of the stationary nature of the apparatus.

Claim 35 recites, "the speed of movement of the upper temperature controlled plate is controlled to achieve a desired temperature profile." Akimoto, column 4, lines 5-35 was cited as

showing these limitations. However, no such disclosure was found in the text indicated. Akimoto appears to refer to "the rising timing of the auxiliary cooling plate 4," column 4 line 17. However, this rising timing "is set at a point in time when the detected temperature or measured temperature reaches, for example, 30°C," column 4, lines 17-17 (emphasis added). Thus, "rising timing" appears to refer to the time at which rising occurs, not the speed with which it occurs. There appears to be no disclosure of controlling the speed of movement, or using such control to achieve a desired temperature profile.

Claim 7 is rejected under 35 USC 103(a) as being unpatentable over admitted prior art in view of Akimoto et al. (USP 6,097,005), Hughes (USP 5,287,914) and Dhindsa (USP 6,245,192) as applied to Claims 1, 5 and further in view of Nanyei et al. (USP 5,580,830).

Claim 7 recites, "each of the plurality of laminar flow paths further comprise a cavity." No such cavity was identified in the cited references. Therefore, no *prima facie* case of obviousness was stated with respect to claim 7. The Office Action's remarks with respect to Nanyei are not well understood. In particular, the Office Action refers to aperture 22 of Nanyei. However, claim 7 does not recite "an aperture," and it is not clear how the aperture of Nanyei is related to a cavity of claim 7. Furthermore, claim 7 recites, "a cavity such that any contaminants or solvents that may be present in the enclosure and that may enter the flow paths will accumulate in the cavity rather than in the laminar flow elements." Nanyei appears to teach away from such a cavity because Nanyei teaches a restriction to prevent or reduce accumulation of contamination in a chamber (see column 2, lines 49-63). The motivation to combine Nanyei with the other references, "to minimize backflow of impurities to the chamber" is not understood and it is not clear what is meant by "chamber" in this context. It is not seen how the structure of Nanyei corresponds to the claim features and clarification is requested. It is requested that any further rejection based on Nanyei specifically identify a feature of Nanyei that corresponds to the cavity of claim 7.

Claims 8, 9, 12-15, 20, 21 are rejected under 35 USC 103(a) as being unpatentable over admitted prior art in view of Akimoto et al. (USP 6,097,005), Hughes (USP 5,287,914) and Dhindsa et al. (USP 6,245,192) as applied to Claims 1, 4, 5 and further in view of Or et al. (USP 6,364,949).

Claim 8 recites, "the flow distribution manifold is in contact with the first temperature controlled plate, and wherein the gas distributed is at substantially the same temperature as the first temperature controlled plate." The Office Action cited Or as disclosing a flow distribution manifold in contact with a temperature controlled plate. However, it was not indicated where Or, or any other cited reference disclosed, "the gas distributed is at substantially the same temperature as the first temperature controlled plate," of claim 8. Because this claim element has not been shown, no *prima facie* case of obviousness is made with respect to claim 8.

With respect to claim 9, the Office Action cited gas inlet 159 of Or as showing a flow channel. However, claim 9 recites, "flow channels." Because temperature controlled plate 151 appears to have only one gas inlet 159, it does not appear that this claim element is shown. Also, it is unclear which feature of Figure 6 of Or is considered to correspond to the flow distribution manifold of claims 8 and 9.

Furthermore, it is submitted that no adequate motivation is provided for combining the teachings of the admitted prior art, Akimoto, Hughes, Dhindsa and Or in the manner indicated by the Office Action. The portion of text identified as providing motivation for the combination (column 3, lines 10-15 of Or) appears to disclose problems with scaling up of a prior art apparatus. This portion of the background of Or does not suggest any particular structure to overcome these problems. Also, it is unclear how the structure referred to by Or relates to other cited prior art structures, particularly that of Dhindsa.

Claim 12 recites providing, "substantially uniform temperature distribution and gas flow distribution across the surface of the wafer." The portion of Or cited as showing this feature (column 5. lines 60-65), discloses, "The gas delivery assembly 149 incorporates various features designed to ensure good thermal contact during processing with minimal temperature gradients," column 5, lines 61-64. The temperature gradients referred to appear to be within gas delivery assembly 149 and this portion of text does not appear to disclose the temperature distribution across the surface of the wafer. Also, this text does not appear to disclose, "the gas distribution system is temperature controlled" of claim 12. Thus, claim 12 is submitted to be additionally allowable.

Claim 13 recites, "an exhaust system configured to regulate the exhaust flow rate of the gas." The Office Action cited vacuum pump 255 as showing these limitations. However, no

regulation of exhaust flow rate by vacuum pump 255 appears to be disclosed. Vacuum pump 255 appears to provide negative pressure for exhaust (see column 9, lines 59-67). However, no regulation of negative pressure or flow rate appears to be disclosed.

Claim 15 is amended to clarify which temperature control element is referred to. Claim 15 recites, "the gas distribution system and the first temperature control element can be adjusted to different temperatures in order to vary the temperature gradient within the device." No such different temperatures to vary temperature gradient appear to be disclosed by the cited portion of Or (column 5, lines 64-68). In particular, Or discloses "various features designed to ensure good thermal contact during processing with minimal temperature gradients," column 5, lines 62-64. No adjustment appears to be indicated with respect to these features and no variation appears to be disclosed with respect to the temperature gradient.

Claim 21 recites, "the gas passes from the flow control system through passages in the first heating plate." The Office Action cited gas inlet 159 of Or as showing this feature. However, gas inlet 159 appears to be a single inlet and no other inlet appears to be shown by Or. Thus, it is not seen how gas inlet 159 can be considered to be "passages" of claim 21.

Claims 26-29 are rejected under 35 USC 103(a) as being unpatentable over admitted prior art in view of Akimoto et al. (USP 6,097,005) and Hughes (USP 5,287,914) as applied to Claims 1, 4, 18 and further in view of Liu et al. (USP 6,753,506). Claims 26 and 29 are amended for clarity of claim language.

Claim 26 as amended recites, "the system varying a rate of movement of the upper temperature altering device or the rate of closure of the enclosure to adjust the temperature of the wafer." These limitations do not appear to be shown by the cited portions of Liu. In particular, Liu does not appear to show movement of a temperature altering device, as heating envelope 113 does not appear to move. Thus, no varying the rate of movement of a temperature altering device appears to be shown. Liu does not appear to disclose varying the rate of closure of workpiece enclosure 32 either. The cited portion of text (column 14, lines 3-18) discloses, "The position of the workpiece enclosure 32 within the heating chamber 11 is raised further and adjusted to maintain the workpiece 30 at a desired temperature 1000°C," column 14, lines 13-16 (emphasis added). However, this portion of text does not appear to discuss the rate of closure of enclosure 32. No discussion of a rate of closure was found in column 7, lines 25-63 either.

Thus, these claim elements of claim 26 are not shown and no *prima facie* case of obviousness is stated with respect to claim 26.

In addition, the motivation for combining the teaching of Liu with admitted prior art in view of Akimoto and Hughes is unclear. "The prior art must suggest the desirability of the claimed invention," MPEP 2143.01-I. In the "Response to Arguments" section, the Office Action stated, "Motivation in teaching of Liu et al regarding improvement of throughput is based on his teaching that by using reduced gas volumes the process time could be reduced leading to improved throughput (Column 3 lines 30-40)" Office Action page 17, lines 16-18. It is not clear if this refers to motivation to combine Liu with Akimoto, Hughes and Dhindsa, or only with Blersch (in which case, the point is moot). To the extent that this motivation is intended to refer to combining Liu with Akimoto, Hughes and Dhindsa for the present rejection of claims 26-28, it is noted that the throughput benefits of Liu appear to apply where a heating chamber has a relatively large volume compared to an enclosure (see column 6, lines 38-51). It is not seen how this would apply to a system of admitted prior art in view of Akimoto, Hughes and Dhindsa. It is unclear how the enclosure of Liu could physically be combined with an apparatus according to the admitted prior art in view of Akimoto, Hughes and Dhindsa. Thus, there appears to be no motivation in Dhindsa to combine the references to form the invention of claim 26, so no *prima facie* case of obviousness is made with respect to claim 26.

Claim 27 recites varying "a rate of change of the temperature of the wafer by adjusting the rate of closure." As discussed with respect to claim 26, the cited prior art does not appear to disclose varying a rate of closure. Also, varying the rate of change of temperature does not appear to be disclosed by Liu. In addition, no adequate motivation to combine the references is identified in the prior art. Therefore, no *prima facie* case of obviousness is stated with respect to claim 27.

Claim 28 recites varying "a rate of closure of the upper or lower portion." As discussed with respect to claim 26, the cited prior art does not appear to disclose varying a rate of closure. In addition, no motivation to combine the references is identified in the prior art. Therefore, no *prima facie* case of obviousness is stated with respect to claim 28.

Claim 29 is amended for clarity. Claim 29 was rejected because "Admitted prior art in view of Akimoto, Hughes and Liu et al, teach all limitations of the claim as explained above,"

Office Action, page 12, lines 13-14. However, the limitations of claim 29 are not the same as those of claims 26-28. In particular, claim 29 recites, "the gas distribution system comprising a plurality of flow paths, and a laminar flow element." Because these claim elements were not identified in admitted prior art, Akimoto, Hughes or Liu, no *prima facie* case of obviousness is stated with respect to claim 29. To the extent that the limitations of claim 29 are similar to those of claims 26-28 discussed above, the arguments stated apply to claim 29. In particular, Liu does not appear to show a device that adjusts the rate of opening and closure of the enclosure by varying one or more rates of movement of the first or second enclosing structures.

Claim 33 is rejected under 35 USC 103(a) as being unpatentable over admitted prior art in view of Akimoto et al. (USP 6,097,005), Hughes (USP 5,287,914) and Dhindsa et al. (USP 6,245,192) and further in view of Okase (USP 5,592,581).

Claim 33 recites, "resistively heated plates." Okase was cited as showing this claim element. However, no adequate motivation is provided for combining the resistive heating of Okase with the admitted prior art in view of Akimoto, Hughes and Dhindsa. In particular, the motivation provided in the Office Action, "to enable heat the wafer [sic] quickly and with high repeatability (Column 2, lines 5-30)" page 13, lines 7-8, appears to refer to Okase's statement, "Thus, the workpiece can be quickly heated with an equal temperature distribution and high repeatability," column 2, lines 22-24. However, this statement does not appear to refer specifically to resistive heating. The preceding sentence, "The workpiece, which is horizontally held in the treatment chamber, is heated by the planar heat generating members disposed on the upper and lower surfaces of the treatment chamber and controlled to predetermined temperatures through respective heat equalizing members," column 2, lines 18-22, does not discuss resistive heating. Thus, the benefits of quick and repeatable heating appear to be the result of other factors. Therefore, it is not seen how this statement provides a motivation to use resistive heating in an apparatus according to other cited references. Because no adequate motivation is provided to combine the teaching of Okase with the other cited references, no *prima facie* case of obviousness is stated with respect to claim 33, and 33 is submitted to be allowable.

Response to "Response to Arguments"

In the portion of the Office Action entitled, "Response to Arguments," it was stated that earlier arguments with respect to rejections of claims 1-15, 18-22, 26-29 and 30-35 were moot in

view of new grounds for rejection. Additional analysis followed. Because these arguments were considered moot, the analysis of these arguments must also be considered moot and no further discussion is necessary. No admission is made with respect to any statement in the "Response to Arguments" portion of the Office Action.

Interview Summary

A telephone interview between Examiner Rakesh Dhingra, Supervisory Patent Examiner Parviz Hassanzadeh and the undersigned attorney occurred on April 18, 2006. It was confirmed in the interview that all rejections of claims 1-15, 18-22, 26-29 and 30-35 of the Office Action of June 28, 2005 were withdrawn by the Office Action of December 19, 2005 in favor of new grounds of rejection. In addition, claims 26-29 were discussed and it was indicated that clarification of some claim language would be desirable to facilitate examination of these claims. It was further confirmed that the rejection of claims 26-29 over admitted prior art in view of Akimoto and Hughes (without the additional reference by Liu) was in error.

CONCLUSION

Accordingly, it is believed that this application is now in condition for allowance and an early indication of its allowance is solicited. However, if the Examiner has any further matters that need to be resolved, a telephone call to the undersigned attorney at 415-318-1167 would be appreciated.

Respectfully submitted,

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